November 29, 2006

Tracy Billington
DWR Division of Planning and Local Assistance
P.O. Box 942836
Sacramento, CA 94236-0001

Shahla Frahnak
SWRCB Division of Financial Planning
1001 I Street, 16th Floor
Sacramento, CA 95814

RE: Comments on the Sacramento Valley Integrated Regional Water Management Plan and Implementation Grant

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Dear Ms Billington and Ms. Frahnak,

I wish to take this opportunity to comment on the Water Management Plan and the Implementation Grant proposed by the Department of Water Resources. My concerns arise from the following considerations:

a) The Plan and Grant presuppose extraction of groundwater from the Tuscan Aquifer and other groundwater resources prior to undertaking the scientific research which is necessary to determine the dynamics of aquifer recharge and which would establish critical baseline data essential to evaluate the impact of increased groundwater extraction;

b) The Plan and Grant ignore the findings and concerns expressed in the Groundwater Users Mitigation Sub-Committee's 1998 report to the Butte County Water Commission and concerns express by other groups in Butte County;

c) The Plan and Grant presume that groundwater extraction is a preferred option and that it is a more economically efficient allocation of resources than alternative plans that focus on improved utilization and conservation of existing surface water resources;

d) "Conjunctive use" of groundwater as currently embodied in the Plan and Grant entails the enrichment of a select group of surface water entitlement holders by permitting and encouraging their exploitation of a public resource, the Tuscan Aquifer.

e) The Plan and Grant expressly extend the DWR's approval to current plans by northern California water districts to sell surface water entitlements. Such plans are fraught with the likelihood of prompting expensive litigation. With each sale, the agricultural community in Butte County faces a heightened risk that farmers

will be held liable for the as yet undetermined risks and damages to property holders under Chapter 33 of the Butte County Groundwater Conservation Code.

I wish to comment briefly on each of these concerns.

a) Lack of Scientific Research Upon Which to Implement Decisions:

There is nearly universal agreement among both experts and lay people alike that the dynamics and mechanisms of aquifer recharge remain obscure and little understood. Nor have the experts established essential elements of a sustainable aquifer. It appears that we are facing a complex set of interactions that integrate the watershed retention region with the aquifer extraction zone. The basic science that is necessary to understand that integration goes far beyond establishing a set of monitor wells. The DWR has not funded this research and certainly the water districts have no interest in developing such an understanding.

Not only does the DWR and the scientific community lack the basic science to comprehend aquifer sustainability, they have not determined the baseline data upon which to calculate changes in the Tuscan Aquifer. Every committee reporting to the Butte County Water Commission has emphasized the lack of data from which to determine if the proposed extraction exceeds the recharge capacity of the Aquifer. Experts conclude that baseline data should cover a twenty year period. Such baseline data must include recordings from the last period of prolonged drought. These the data do not exist. As in the case of the basic research in aquifer dynamics, it will require sustained funding and time to develop them.

The potential for harm, both economic and environmental, is enormous. The exploitation of the groundwater resource in the absence of adequate means to measure the effect pumping or an understanding of the fundamental natural processes defies comprehension. It is the height of folly bordering on irresponsibility to put forward a Plan and Grant that promote the extraction of groundwater from the Tuscan Aquifer in the absence of essential scientific research and baseline data. As currently proposed, the Plan shoves all the risk onto the landowners of the eastside of the valley and all the benefit onto the shareholders of the water districts.

b) Findings and Concerns of Committees and Public Interest Groups in Butte County

Following the passage of Measure G in 1996, a number of committees studied the implementation of Chapter 33 of the Butte County Groundwater Conservation Code. As noted above, the Mitigation Sub-committee focused on the lack of baseline data from which to monitor and evaluate possible changes in the Tuscan Aquifer in response to “conjunctive use” pumping. Chapter 33 quantifies measures which would supposedly trigger a cessation of pumping (e.g. zero subsidence, a drop of water level greater than five feet in proximate wells). However, the study groups were deeply concerned about the manner in which such specific measurements would be determined in the face of

seasonal variations and multi-year shifts in annual precipitation. Answers to these questions are still forthcoming.

The DWR Plan and Grant fail to recognize the concerns of both the official committees as well as the numerous environmental action groups who oppose the implementation of "conjunctive use" at this time. Reasoned voices in the community ask for a risk analysis and structured monitoring process before implementation of any "conjunctive use" plan. Neither the Plan nor the Grant address these concerns. Although mandated to seek public input from all the stakeholders, the DWR appears to sweep aside the concerns of any person or entity not associated with the water districts or their potential purchasers. In ignoring legitimate concerns, the DWR loses its credibility as a neutral, third party facilitator. Rather it creates the impression of overt collusion with the water districts.

c) Groundwater Extraction as the Preferred Option

For better or worse, California must find room for another 25 million people by the year 2025. Just as generals always fight the last war, the DWR's Plan and Grant presume that the same resource management model of the previous fifty years will meet the demands of the next twenty years. Fifty years of damming, draining and pumping from one end of the Central Valley to the other has fundamentally changed the resource base of the State. It is time for a re-think of fundamental assumptions as to the sources and uses of the state's water. Despite this urgency, the DWR's Plan and Grant offer no innovative ideas on meeting the future demands on an increasingly scarce resource.

From what little is known of the morphology of the Tuscan Aquifer, it is clearly a finite resource with, as yet, unknown delimiters. As noted above, how much groundwater may safely be extracted, if any, remains the central question that should drive any Plan. It is highly probable that any extraction program that preserves the environmental and economic foundation of Butte County will produce only a small percentage of the total demand for fresh water that the DWR has projected in its published scenarios.

Yet alternatives to the DWR's demand and resource scenarios clearly exist. I have only to point to the 2005 policy analysis of the Pacific Institute. This analysis offers a fundamentally different model based on modifying the demand side of the equation through changes in the price structures for water. It changes the supply side by improving efficiencies in the distribution and utilization of water for both urban and rural end-users.

Other models are readily available for study and analysis. The Gulf States of United Arab Emirates (UAE) have created metropolitan oases and world-class financial centers in one of the driest regions of the world. What catches the eye are the extensive green-zones within the urban limits, all irrigated with recycled water. Using established

technology for sea water extraction, the UAE's leaders had the vision and motivation to move beyond the inherent limitations of the fresh water resource of the area. In so doing they have created a sustainable urban environment with a capacity grow and absorb population increases over the next 100 years. Alternatives such as these should command the attention and study of DWR's staff and policy makers. Pumping the Tuscan Aquifer may be the familiar option for the DWR planners. It may be, however, neither the most economically viable nor the most sustainable option. It is time for vision and innovation, not a repeat of Owens Valley.

d) "Conjunctive use" and Enrichment of the Water District Shareholders

A key question arising from ""conjunctive use"" of groundwater centers on the unequal benefits that accrue to the members of the water districts in comparison to the stakeholders of the eastern side of the Sacramento Valley. The water districts have enjoyed the use of subsidized surface water for over sixty years. The entire rice industry developed around the public investment in the dams and canals that brought water to the rice fields. Special industries have enjoyed public subsidies from the founding of the Republic. Subsidies in their many forms for the rice industry continue a long and hoary tradition.

Nor will I dispute the decision of a farmer who chooses to fallow his land and sell his surface water entitlement. Individuals make many different life choices. Idling the land rather than producing rice or another crop may appear perfectly reasonable for any number of personal reasons. While serious public policy considerations may arise, up to now, this society acknowledges the right of the individual to make such choices.

My sense of fairness and equity is deeply offended, however, when a farmer chooses to sell off his surface water entitlement but then pumps groundwater from the Tuscan Aquifer to maintain his farming operation. In the "conjunctive use" scenario, farmers, such as the members of Western Canal Water District, purchase water at a subsidized rate and sell at full market value. Not satisfied with an inflated profit margin, they seek to maintain their income from their subsidized rice operation by utilizing a scarce resource owned by all the stakeholders of Butte County.

This substitution, in the name of "conjunctive use," amounts to an egregious double-dipping at the public expense. Only the surface water entitlement holders (the water district members) directly benefit from the extraction of groundwater from the Tuscan Aquifer. Only the stakeholders of the eastern edge of the Valley assume the risks of depletion and the potential dislocation arising from the misuse of this public resource. I can find no equity or social justification for this scenario. I am appalled that the DWR would propose an implementation scheme that promotes such a gross misuse of a scarce, public resource.

e) Potential for Litigation

Chapter 33 of the Butte County Groundwater Conservation Code expressly assigns liability to individuals or entities who extract groundwater in a “conjunctive use” scenario for the damages that a stakeholder may incur as the result of pumping and transfer. In the absence of the scientific research and baseline data as noted above, “conjunctive use” entails a hidden and unknown risk, and potential liability, to the landowner who sells off his surface water entitlement presuming that he will then substitute with groundwater.

The possible plaintiffs and litigants include every landowner with a well within Butte County. Add to that list the public entities such as the City of Chico and the Butte County itself. Every residential well that is left stranded at the end of the summer becomes a potential spark for litigation. Should the next drought cycle repeat the stress on residential and public wells as occurred in 1994, a firestorm of litigation may reduce the whole concept of “conjunctive use” to ashes.

In its current proposal, the Western Canal Water District allocated only $100,000 in mitigation costs and $25,000 in legal expenses for a water sale that exceeds 15 million dollars over the next ten years. A single suit brought about by a landowner with a stranded well will easily exhaust this meager budget. And how can the “conjunctive use” pumper, that eager seller of a surface water entitlement, evaluate and estimate the damages incurred by a household, or a school, or a hospital for the loss of water? How should such losses be apportioned across the host of pumpers and water districts? It is not hard to envision months of litigation as attorneys and the courts sort out the liability of the defendants and damages for the plaintiffs. Perhaps a better name than “conjunctive use” would be the “Attorneys’ Retirement Fund” scheme.

Under its current guise, the DWR itself may become a target of litigation. In the event that landowners in Butte County find themselves with stranded wells following “conjunctive use” pumping, they may choose to seek redress from the state. The DWR knows, and certainly should have known, that the current information, baseline data and foundational scientific research are inadequate for purposes of evaluating risk and for making informed decisions. Public interest groups in Butte County have advised the DWR numerous times of the possible negative effect pumping the Tuscan Aquifer and of the impossibility of determining safe levels of groundwater extraction. Damages to landholders and public entities in Butte County are foreseeable. A plausible case for DWR’s negligence appears evident. Should the potential level of damages bankrupt the water districts and individual pumpers, the DWR may have the deepest pocket of all.

Conclusion:

I once again insist that there is no justification for proposing the “conjunctive use” pumping of the Tuscan Aquifer before funding the basic research on the dynamics of

sustainability of the aquifer and establishing the baseline data upon which to evaluate and monitor groundwater extractions. To proceed with the Water Management Plan and the Implementation Grant is premature and irresponsible. We have reason to expect more from our state agencies.

Respectfully submitted for your consideration.

Regards,

Roy Ekland
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